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BIO TECHNOLOGY
SYSTEMS
BRANCH 2003

JULY 29 2003
TECH CENTER 1600
U.S. PATENT & TRADEMARK OFFICE

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/229,751B
Source: 1600
Date Processed by STIC: 7/22/2003

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/ebc/efs/downloads/documents.htm>> , EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 04/24/2003

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: <u>09/229,751B</u>
ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE		
1 <input checked="" type="checkbox"/> Wrapped Nucleic <input type="checkbox"/> Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent wrapping.	
2 <input type="checkbox"/> Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.	
3 <input type="checkbox"/> Misaligned Amino Numbering	The numbering under each 3 rd amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.	
4 <input type="checkbox"/> Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.	
5 <input type="checkbox"/> Variable Length	Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.	
6 <input type="checkbox"/> PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.	
7 <input type="checkbox"/> Skipped Sequences (OLD RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (ii) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.	
8 <input type="checkbox"/> Skipped Sequences (NEW RULES)	Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000	
9 <input type="checkbox"/> Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing. Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present. In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.	
10 <input type="checkbox"/> Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence	
11 <input type="checkbox"/> Use of <220>	Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section. (See "Federal Register," 06/01/1998, Vol 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)	
12 <input type="checkbox"/> PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.	
13 <input type="checkbox"/> Misuse of n	n can only be used to represent a single nucleotide in a nucleic acid sequence. N is not used to represent any value not specifically a nucleotide.	



1600

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/229,751B

DATE: 07/22/2003
TIME: 13:49:33

Input Set : A:\Doseq.715
Output Set: N:\CRF4\07222003\I229751B.raw

SEQUENCE LISTING

**Does Not Comply
Corrected Diskette Needed**

pp 1-8

ERRORED SEQUENCES

- 64 (2) INFORMATION FOR SEQ ID NO: 2:
66 (i) SEQUENCE CHARACTERISTICS:
67 (A) LENGTH: 21 base pairs
68 (B) TYPE: nucleic acid
69 (C) STRANDEDNESS: single
70 (D) TOPOLOGY: unknown
72 (ii) MOLECULE TYPE: DNA (genomic)
74 (iii) HYPOTHETICAL: NO
76 (iv) ANTI-SENSE: NO

P.2 (global error)

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/229,751B

DATE: 07/22/2003
TIME: 13:49:33

Input Set : A:\Dosseq.715
Output Set: N:\CRF4\07222003\I229751B.raw

80 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
E--> 82 AATCATTTC TGATTAAGCC G 21
W--> 83 21
85 (2) INFORMATION FOR SEQ ID NO: 3:
87 (i) SEQUENCE CHARACTERISTICS:
88 (A) LENGTH: 21 base pairs
89 (B) TYPE: nucleic acid
90 (C) STRANDEDNESS: single
91 (D) TOPOLOGY: unknown
93 (ii) MOLECULE TYPE: DNA (genomic)
95 (iii) HYPOTHETICAL: NO
97 (iv) ANTI-SENSE: NO
101 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

see item 1 on Error summary sheet

E--> 103 AATCATTTC TGAGGTCTCC G
W--> 104 21
127 (2) INFORMATION FOR SEQ ID NO: 5:
129 (i) SEQUENCE CHARACTERISTICS:
130 (A) LENGTH: 21 base pairs
131 (B) TYPE: nucleic acid
132 (C) STRANDEDNESS: single
133 (D) TOPOLOGY: unknown
135 (ii) MOLECULE TYPE: DNA (genomic)
137 (iii) HYPOTHETICAL: NO
139 (iv) ANTI-SENSE: NO
143 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:

same error

E--> 145 AATCATTTC TTCCTAACGGT G
W--> 146 21
148 (2) INFORMATION FOR SEQ ID NO: 6:
150 (i) SEQUENCE CHARACTERISTICS:
151 (A) LENGTH: 21 base pairs
152 (B) TYPE: nucleic acid
153 (C) STRANDEDNESS: single
154 (D) TOPOLOGY: unknown
156 (ii) MOLECULE TYPE: DNA (genomic)
158 (iii) HYPOTHETICAL: NO
160 (iv) ANTI-SENSE: NO
164 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:

same

E--> 166 AATCATTTC TGTTGCCGCC G
W--> 167 21
169 (2) INFORMATION FOR SEQ ID NO: 7:
171 (i) SEQUENCE CHARACTERISTICS:
172 (A) LENGTH: 21 base pairs
173 (B) TYPE: nucleic acid
174 (C) STRANDEDNESS: single
175 (D) TOPOLOGY: unknown
177 (ii) MOLECULE TYPE: peptide ? This is a DNA sequence.
179 (iii) HYPOTHETICAL: NO
181 (iv) ANTI-SENSE: NO
185 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/229,751B

DATE: 07/22/2003
TIME: 13:49:33

Input Set : A:\Dosseq.715
Output Set: N:\CRF4\07222003\I229751B.raw

E--> 187 AATCATTTC TGCCTCGTTG G

same

W--> 188 21

190 (2) INFORMATION FOR SEQ ID NO: 8:
192 (i) SEQUENCE CHARACTERISTICS:
193 (A) LENGTH: 21 base pairs
194 (B) TYPE: nucleic acid
195 (C) STRANDEDNESS: single
196 (D) TOPOLOGY: unknown
198 (ii) MOLECULE TYPE: peptide?
200 (iii) HYPOTHETICAL: NO
202 (iv) ANTI-SENSE: NO
206 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:

E--> 208 AATCATTTC TGCCCTCG G

same

W--> 209 21

211 (2) INFORMATION FOR SEQ ID NO: 9:
213 (i) SEQUENCE CHARACTERISTICS:
214 (A) LENGTH: 21 base pairs
215 (B) TYPE: nucleic acid
216 (C) STRANDEDNESS: single
217 (D) TOPOLOGY: unknown
219 (ii) MOLECULE TYPE: DNA (genomic)
221 (iii) HYPOTHETICAL: NO
223 (iv) ANTI-SENSE: NO
227 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:

E--> 229 AATCATTTC TGATGCCGAA G

same

W--> 230 21

232 (2) INFORMATION FOR SEQ ID NO: 10:
234 (i) SEQUENCE CHARACTERISTICS:
235 (A) LENGTH: 21 base pairs
236 (B) TYPE: nucleic acid
237 (C) STRANDEDNESS: single
238 (D) TOPOLOGY: unknown
240 (ii) MOLECULE TYPE: DNA (genomic)
242 (iii) HYPOTHETICAL: NO
244 (iv) ANTI-SENSE: NO
248 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:

E--> 250 AATCATTTC TGCCTACTGG G

same

W--> 251 21

253 (2) INFORMATION FOR SEQ ID NO: 11:
255 (i) SEQUENCE CHARACTERISTICS:
256 (A) LENGTH: 21 base pairs
257 (B) TYPE: nucleic acid
258 (C) STRANDEDNESS: single
259 (D) TOPOLOGY: unknown
261 (ii) MOLECULE TYPE: DNA (genomic)
263 (iii) HYPOTHETICAL: NO
265 (iv) ANTI-SENSE: NO
269 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:

E--> 271 AATCATTTC TTAAGGGGAC G

same

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/229,751B

DATE: 07/22/2003
TIME: 13:49:33

Input Set : A:\Dosseq.715
Output Set: N:\CRF4\07222003\I229751B.raw

W--> 272 21

274 (2) INFORMATION FOR SEQ ID NO: 12:
276 (i) SEQUENCE CHARACTERISTICS:
277 (A) LENGTH: 21 base pairs
278 (B) TYPE: nucleic acid
279 (C) STRANDEDNESS: single
280 (D) TOPOLOGY: unknown
282 (ii) MOLECULE TYPE: DNA (genomic)
284 (iii) HYPOTHETICAL: NO
286 (iv) ANTI-SENSE: NO
290 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:

E--> 292 ATTCAATTTC TTCTTTGGCG T

W--> 293 21

295 (2) INFORMATION FOR SEQ ID NO: 13:
297 (i) SEQUENCE CHARACTERISTICS:
298 (A) LENGTH: 21 base pairs
299 (B) TYPE: nucleic acid
300 (C) STRANDEDNESS: single
301 (D) TOPOLOGY: unknown
303 (ii) MOLECULE TYPE: DNA (genomic)
305 (iii) HYPOTHETICAL: NO
307 (iv) ANTI-SENSE: NO
311 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:

E--> 313 ATTCATTTTC TGATTAGGAA G

W--> 314 21

316 (2) INFORMATION FOR SEQ ID NO: 14:
318 (i) SEQUENCE CHARACTERISTICS:
319 (A) LENGTH: 21 base pairs
320 (B) TYPE: nucleic acid
321 (C) STRANDEDNESS: single
322 (D) TOPOLOGY: unknown
324 (ii) MOLECULE TYPE: DNA (genomic)
326 (iii) HYPOTHETICAL: NO
328 (iv) ANTI-SENSE: NO
332 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:

E--> 334 ATTCATTTTC TGCCGACTGC T

W--> 335 21

379 (2) INFORMATION FOR SEQ ID NO: 17:
381 (i) SEQUENCE CHARACTERISTICS:
382 (A) LENGTH: 21 base pairs
383 (B) TYPE: nucleic acid
384 (C) STRANDEDNESS: single
385 (D) TOPOLOGY: unknown
387 (ii) MOLECULE TYPE: DNA (genomic)
389 (iii) HYPOTHETICAL: NO
391 (iv) ANTI-SENSE: NO
395 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:

E--> 397 ATTCAATTTC TGCCGCAGAA T

W--> 398 21

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/229,751B

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Input Set : A:\Dosseq.715
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926 (2) INFORMATION FOR SEQ ID NO: 43:
 928 (i) SEQUENCE CHARACTERISTICS:
 929 (A) LENGTH: 7 amino acids
 930 (B) TYPE: amino acid
 931 (C) STRANDEDNESS: single
 932 (D) TOPOLOGY: unknown
 934 (ii) MOLECULE TYPE: peptide
 936 (iii) HYPOTHETICAL: NO
 938 (iv) ANTI-SENSE: NO
 942 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 43:

E--> 944 Thr-~~Tyr~~-~~Pro~~-~~Val~~-~~Pro~~-His-Arg
 E--> 945 1 5

delete all dashes - they are invalid

989 (2) INFORMATION FOR SEQ ID NO: 46:
 991 (i) SEQUENCE CHARACTERISTICS:
 992 (A) LENGTH: 21 base pairs
 993 (B) TYPE: nucleic acid
 994 (C) STRANDEDNESS: single
 995 (D) TOPOLOGY: unknown
 997 (ii) MOLECULE TYPE: DNA (genomic)
 999 (iii) HYPOTHETICAL: NO
 1001 (iv) ANTI-SENSE: NO
 1005 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 46:

E--> 1007 ACGCATCGTT TGCCTTCTCG G

W--> 1008 21

see item 1 on Error Summary Sheet

*do not use TAB codes
between amino acid
numbers*

use space characters

1010 (2) INFORMATION FOR SEQ ID NO: 47:
 1012 (i) SEQUENCE CHARACTERISTICS:
 1013 (A) LENGTH: 21 base pairs
 1014 (B) TYPE: nucleic acid
 1015 (C) STRANDEDNESS: single
 1016 (D) TOPOLOGY: unknown
 1018 (ii) MOLECULE TYPE: DNA (genomic)
 1020 (iii) HYPOTHETICAL: NO
 1022 (iv) ANTI-SENSE: NO
 1026 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 47:

E--> 1028 GTTACTAGTA GGGGAATGT T

same

W--> 1029 21

1031 (2) INFORMATION FOR SEQ ID NO: 48:
 1033 (i) SEQUENCE CHARACTERISTICS:
 1034 (A) LENGTH: 21 base pairs
 1035 (B) TYPE: nucleic acid
 1036 (C) STRANDEDNESS: single
 1037 (D) TOPOLOGY: unknown
 1039 (ii) MOLECULE TYPE: DNA (genomic)
 1041 (iii) HYPOTHETICAL: NO
 1043 (iv) ANTI-SENSE: NO
 1047 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 48:

E--> 1049 AAGCTGTGGG TGATTCCCTCA G

W--> 1050 21

1052 (2) INFORMATION FOR SEQ ID NO: 49:

some

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/229,751B

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Input Set : A:\Dosseq.715
Output Set: N:\CRF4\07222003\I229751B.raw

1054 (i) SEQUENCE CHARACTERISTICS:
1055 (A) LENGTH: 21 base pairs
1056 (B) TYPE: nucleic acid
1057 (C) STRANDEDNESS: single
1058 (D) TOPOLOGY: unknown
1060 (ii) MOLECULE TYPE: DNA (genomic)
1062 (iii) HYPOTHETICAL: NO
1064 (iv) ANTI-SENSE: NO
1068 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 49:

E--> 1070 TATTCGCCCTC CTCATAGGCA T

same

W--> 1071 21

1220 (2) INFORMATION FOR SEQ ID NO: 57:
1222 (i) SEQUENCE CHARACTERISTICS:
1223 (A) LENGTH: 21 base pairs
1224 (B) TYPE: nucleic acid
1225 (C) STRANDEDNESS: single
1226 (D) TOPOLOGY: unknown
1228 (ii) MOLECULE TYPE: DNA (genomic)
1230 (iii) HYPOTHETICAL: NO
1232 (iv) ANTI-SENSE: NO
1236 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 57:

E--> 1238 TCGTATCCTC CGTATTGGA T

same

W--> 1239 21

1241 (2) INFORMATION FOR SEQ ID NO: 58:
1243 (i) SEQUENCE CHARACTERISTICS:
1244 (A) LENGTH: 21 base pairs
1245 (B) TYPE: nucleic acid
1246 (C) STRANDEDNESS: single
1247 (D) TOPOLOGY: unknown
1249 (ii) MOLECULE TYPE: DNA (genomic)
1251 (iii) HYPOTHETICAL: NO
1253 (iv) ANTI-SENSE: NO
1257 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 58:

E--> 1259 CTTTTGTGCGC CTCTGCATCG T

same

W--> 1260 21

1262 (2) INFORMATION FOR SEQ ID NO: 59:
1264 (i) SEQUENCE CHARACTERISTICS:
1265 (A) LENGTH: 21 base pairs
1266 (B) TYPE: nucleic acid
1267 (C) STRANDEDNESS: single
1268 (D) TOPOLOGY: unknown
1270 (ii) MOLECULE TYPE: DNA (genomic)
1272 (iii) HYPOTHETICAL: NO
1274 (iv) ANTI-SENSE: NO
1278 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 59:

E--> 1280 TTTGATTCTC CGCTTCGTCG G

same

W--> 1281 21

1662 (2) INFORMATION FOR SEQ ID NO: 78:
1664 (i) SEQUENCE CHARACTERISTICS:

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/229,751B

DATE: 07/22/2003
TIME: 13:49:33

Input Set : A:\Dosseq.715
Output Set: N:\CRF4\07222003\I229751B.raw

1665 (A) LENGTH: 7 amino acids
1666 (B) TYPE: amino acid
1667 (C) STRANDEDNESS: single
1668 (D) TOPOLOGY: unknown
1670 (iii) MOLECULE TYPE: peptide
1672 (iii) HYPOTHETICAL: NO
1674 (iv) ANTI-SENSE: NO
1678 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 78:
1680 Phe Asp Ser Pro Leu Arg Arg 79
1681 1 5
1683 (2) INFORMATION FOR SEQ ID NO: 78:
1685 (i) SEQUENCE CHARACTERISTICS:
1686 (A) LENGTH: 7 amino acids
1687 (B) TYPE: amino acid
1688 (C) STRANDEDNESS: single
1689 (D) TOPOLOGY: unknown
1691 (iii) MOLECULE TYPE: peptide
1693 (iii) HYPOTHETICAL: NO
1695 (iv) ANTI-SENSE: NO
1699 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 79:
1701 Trp Ser Pro Leu His Lys His
1702 1 5

OK

sel p. 8

09/229,751B 8

(2) INFORMATION FOR SEQ ID NO: 82:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 6 amino acids
- (B) TYPE: amino acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: unknown
- (ii) MOLECULE TYPE: peptide
- (iii) HYPOTHETICAL: NO
- (iv) ANTI-SENSE: NO
- (v) FRAGMENT TYPE: internal
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 82:

Ser Pro Leu Xaa Xaa His

1

5

last sequence in submitted
file